In the Claims:

Claim 1 (Currently Amended). An apparatus for creating therapeutic charge transfer in tissue, comprising:

a coil generating a changing magnetic field to induct an electric field in the tissue exceeding [[1]] 10 mV/cm when said coil is 5 cm from the tissue, said magnetic field having a growth phase and a decay phase, a duration of the growth phase being at least ten times a duration of the decay phase; and

a control circuit controlling a current fed to said coil, said control circuit including two subcircuits and a switch for switching between a first of said subcircuits and a second of said subcircuits, said first of said subcircuits causing said growth phase, said second of said subcircuits causing said decay phase;

each one of said subcircuits having a respective time constant (λ) equaling an inductance (L) divided by a resistance (R) of said respective one of said subcircuits; and

said λ of said second subcircuit being at least ten times said λ of said first subcircuit.

Claim 2 (Previously Presented). The apparatus according to claim 1, wherein said magnetic field is saw-tooth shaped.

Claims 3-5 (Canceled).

Claim 6 (Currently Amended). The apparatus according to claim [[4]] 1, wherein said first ~~subcircuits~~ subcircuit has a λ no greater than 1, λ being calculated by dividing a resistance (R) of said first subcircuit by an inductance (L) of said first subcircuit.

Claim 7 (Currently Amended). ~~The~~ An apparatus ~~according to claim 4, wherein~~ for creating therapeutic charge transfer in tissue, comprising:

a coil generating a changing magnetic field to induct an electric field in the tissue exceeding 10 mV/cm when said coil is 5 cm from the tissue, said magnetic field having a growth phase and a decay phase, a duration of the growth phase being at least ten times a duration of the decay phase; and

a control circuit controlling a current fed to said coil, said control circuit including two subcircuits and a switch for switching between a first of said subcircuits and a second of

said subcircuits, said first of said subcircuits causing said growth phase, said second of said subcircuits causing said decay phase;

said second subcircuit ~~has~~ having a time constant (λ) no less than 10, λ being calculated by dividing a resistance (R) of said second subcircuit by an inductance (L) of said second subcircuit.

Claim 8 (Currently Amended). ~~The~~ An apparatus ~~according to claim 4, wherein~~ for creating therapeutic charge transfer in tissue, comprising:

a coil generating a changing magnetic field to induct an electric field in the tissue exceeding 10 mV/cm when said coil is 5 cm from the tissue, said magnetic field having a growth phase and a decay phase, a duration of the growth phase being at least ten times a duration of the decay phase; and

a control circuit controlling a current fed to said coil, said control circuit including two subcircuits and a switch for switching between a first of said subcircuits and a second of said subcircuits, said first of said subcircuits causing said

growth phase, said second of said subcircuits causing said decay phase;

said second subcircuit ~~includes~~ including an Integrated Gate Bipolar Transistor (IGBT) for increasing a resistance of said second subcircuit.

Claim 9 (Previously Presented). The apparatus according to claim 1, wherein said coil is configured to receive a voltage exceeding 2000 V.

Claim 10 (Currently Amended). ~~The~~ An apparatus ~~according to claim 1, wherein~~ for creating therapeutic charge transfer in tissue, comprising a coil generating a changing magnetic field to induct an electric field in the tissue exceeding 10 mV/cm when said coil is 5 cm from the tissue, said coil ~~has~~ having a duty cycle of at least ten percent.

Claim 11 (Original). The apparatus according to claim 10, wherein said coil has a duty cycle of at least eighty percent.

Claim 12 (Original). The apparatus according to claim 1, wherein said coil is liquid cooled.

Claim 13 (Original). The apparatus according to claim 12, wherein said coil is cylindrical and has an inner channel and an outer channel through which coolant can be passed to cool said coil.

Claim 14 (Original). The apparatus according to claim 1, wherein said magnetic field has an asymmetric waveform.

Claim 15 (Previously Presented). The apparatus according to claim 1, wherein said coil generates a changing magnetic field to induct an electric field in the tissue exceeding 10 mV/cm when said coil is 5 cm from the tissue.

Claim 16 (Currently Amended). A method for magnetically inducting an electrical field in tissue to create therapeutic charge transfer in the tissue, which comprises:

providing an apparatus ~~according to claim 1~~ for creating therapeutic charge transfer in tissue, comprising a coil generating a changing magnetic field to induct an electric field in the tissue exceeding 10 mV/cm when said coil is 5 cm from the tissue;

increasing the magnetic field in said coil linearly over time to induct an electrical field having a first direction in the tissue for a first period of time; and

decreasing the magnetic field linearly over time to induct an electrical field having a second direction opposite said first direction in the tissue for a second period time, the second period of time being different than said first period of time.

Claim 17 (Previously Presented). The method according to claim 16, wherein the first period of time is longer time than the second period of time.

Claim 18 (Previously Presented). The method according to claim 16, which further comprises repeating the increasing step and the decreasing step.

Claim 19 (Canceled).

Claim 20 (Currently Amended). The method according to claim 16, wherein the increasing and the decreasing of said magnetic field has a saw-tooth shaped intensity over time~~, wherein said saw-tooth shaped intensity increases linearly and decreases linearly~~.

Claim 21 (Previously Presented). The method according to claim 16, wherein said first period of time is at least five times as long as said second period of time.

Claim 22 (Previously Presented). The method according to claim 16, wherein the increasing of said magnetic field includes increasing said magnetic field at a sufficient rate so that said electric field in the tissue is at least [[1]] 10 mV/cm.

Claim 23 (Currently Amended). ~~The~~ A method a~~ccording to claim 16, wherein~~ for magnetically inducting an electrical field in tissue to create therapeutic charge transfer in the tissue, which comprises:

providing an apparatus for creating therapeutic charge transfer in tissue, comprising a coil generating a changing magnetic field to induct an electric field in the tissue exceeding 10 mV/cm when said coil is 5 cm from the tissue;

increasing the magnetic field in said coil ~~the increasing of said magnetic field includes increasing said magnetic field~~ steadily to induct an electrical field having a first direction in the tissue for a first period of time ~~so that said electric~~

~~field varies~~ varying less than 10% in intensity for at least 90% of said first period of time; and

decreasing the magnetic field to induct an electrical field having a second direction opposite said first direction in the tissue for a second period time, the second period of time being different than said first period of time.

Claim 24 (Previously Presented). The method according to claim 17, which further comprises minimizing said second period of time.

Claim 25 (Currently Amended). ~~The~~ A method ~~according to claim 16, which further comprises~~ for magnetically inducting an electrical field in tissue to create therapeutic charge transfer in the tissue, which comprises:

providing an apparatus for creating therapeutic charge transfer in tissue, comprising a coil generating a changing magnetic field to induct an electric field in the tissue exceeding 10 mV/cm when said coil is 5 cm from the tissue;

increasing the magnetic field in said coil to induct an electrical field having a first direction in the tissue for a first period of time;

decreasing the magnetic field to induct an electrical field having a second direction opposite said first direction in the tissue for a second period time, the second period of time being different than said first period of time;

repeating the increasing and the decreasing steps in alternating order;

defining a duty cycle as said first time period divided by a sum of said first and second time period; and

maintaining said duty cycle to at least sixty-three percent.

Claim 26 (Previously Presented). The method according to claim 16, which further comprises:

creating an ionic charge transfer in the tissue in a first direction during the increasing step; and

creating an ionic charge transfer in the tissue in a second direction opposite said first direction during the decreasing step; and

controlling a rate of change of said magnetic field and duration of the increasing step and the decreasing step so that said charge transfer in said second direction is no more than half said charge transfer in said first direction.

Claim 27 (Currently Amended). ~~The~~ A method ~~according to claim 16, which further comprises~~ for magnetically inducting an electrical field in tissue to create therapeutic charge transfer in the tissue, which comprises:

providing an apparatus for creating therapeutic charge transfer in tissue, comprising a coil generating a changing magnetic field to induct an electric field in the tissue exceeding 10 mV/cm when said coil is 5 cm from the tissue;

increasing the magnetic field in said coil to induct an electrical field having a first direction in the tissue for a first period of time; and

decreasing the magnetic field to induct an electrical field having a second direction opposite said first direction in the tissue for a second period time, the second period of time being different than said first period of time;

creating said magnetic field in a coil;

connecting said coil to an increase subcircuit that feeds current to said coil during the increasing step; and

connecting said coil to a decrease subcircuit that robs current from said coil during the decreasing step.

Claim 28 (Currently Amended). The method according to claim 27, which further comprises:

interconnecting said coil and said increase subcircuit with an Integrated Gate Bipolar Transistor (IGBT); and

interconnecting said coil and said decrease subcircuit with said IGBT.

Claim 29 (Previously Presented). The method according to claim 28, wherein said IGBT has a stand-off voltage of at least two thousand volts.

Claim 30 (Previously Presented). The method according to claim 27, which further comprises:

passing an electrical current through said coil to create said magnetic field; and

during the increasing step, raising said electrical current to at least one thousand watts.